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(54) **MANUFACTURE OF SEMICONDUCTOR DEVICE**

higher and the range of boron becomes longer.

(57) Abstract:

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PROBLEM TO BE SOLVED: To manufacture a low-loss power semiconductor device provided with a super junction which can be manufactured easily and is suitable for mass production, by controlling the acceleration energy of impurity ions and the area of the emitting area of the impurity ions.

SOLUTION: At the time of forming a striped P+ boron-implanted area 3a having a uniform width from the front surface to the rear surface of an N+ silicon wafer 1, it is necessary to form a uniform vertical boron distribution by continuously changing the acceleration energy of implanted boron ions and the range of boron in the wafer 1. Since the lateral extent of the implanted boron becomes broader as the range becomes longer, the concentration and width of the area 3a are made uniform in the vertical direction by controlling the width of the boron ion emitting area, so that the area becomes narrower as the acceleration energy becomes

